

**ABSTRACT OF THE DISCLOSURE**

A system for providing encryption for the rerouting of multi-media data flow packets is disclosed. Generally, a first endpoint is connected to a second endpoint, wherein the first  
5 endpoint comprises a transceiver, encryption software stored within the first endpoint defining functions to be performed by the first endpoint, and a processor. The processor is configured by the encryption software to perform the steps of: assigning a sequence number to a first multi-media data flow packet received by a first endpoint, wherein the first multi-media data flow packet is within a series of multi-media data flow packets; pseudo-randomly shuffling the  
10 sequence number of the first multi-media data flow packet; and, transmitting the pseudo-randomly shuffled sequence number to a second endpoint. These steps may be performed by a programmed controller, or other hardware, instead of, or in addition to, being performed in accordance with software.